

July 30, 2019

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Colorado Oil & Gas Conservation

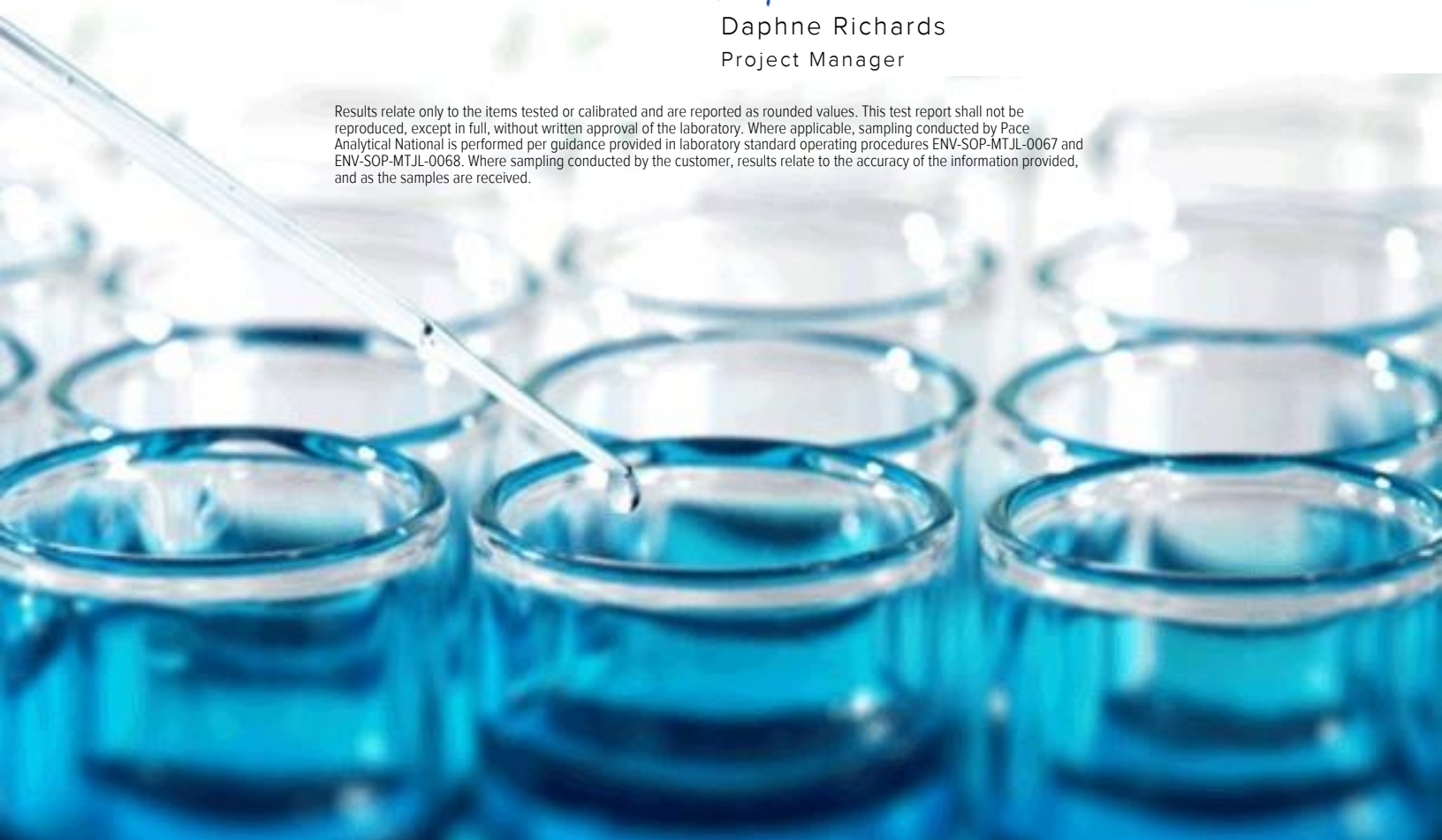
Sample Delivery Group: L1120882
Samples Received: 07/20/2019
Project Number: PILCHER #1
Description: OWP Pilcher #1 AST Removal
Site: 224353
Report To: Jim Hughes
707 Wapiti Court, Ste 204
Rifle, CO 81650

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



0718191530 L1120882-01 Solid

Collected by
Jim Hughes

Collected date/time
07/18/19 15:30

Received date/time
07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1315146	1	07/23/19 13:41	07/23/19 13:41	EL	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1315960	1	07/26/19 08:00	07/26/19 15:40	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1315824	1	07/23/19 18:15	07/23/19 18:25	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1315287	1	07/22/19 12:29	07/22/19 13:14	EDA	Mt. Juliet, TN
Mercury by Method 7471A	WG1317742	1	07/25/19 17:36	07/26/19 12:35	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1317524	1	07/25/19 23:06	07/26/19 17:41	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1318975	1	07/26/19 08:44	07/28/19 20:21	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1318636	50	07/28/19 17:07	07/29/19 12:08	KME	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1318694	1	07/27/19 19:02	07/28/19 05:17	LEA	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

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8 Al

9 Sc

0718191530 L1120882-02 Waste

Collected by
Jim Hughes

Collected date/time
07/18/19 15:30

Received date/time
07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1316067	1	07/23/19 14:47	07/23/19 14:47	BAA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1316980	1	07/24/19 18:48	07/25/19 03:50	TRB	Mt. Juliet, TN

0718191540 L1120882-03 Solid

Collected by
Jim Hughes

Collected date/time
07/18/19 15:40

Received date/time
07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1315146	1	07/23/19 13:43	07/23/19 13:43	EL	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1315960	1	07/26/19 08:00	07/26/19 15:41	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1315824	1	07/23/19 18:15	07/23/19 18:25	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1315287	1	07/22/19 12:29	07/22/19 13:14	EDA	Mt. Juliet, TN
Mercury by Method 7471A	WG1317742	1	07/25/19 17:36	07/26/19 12:38	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1317524	1	07/25/19 23:06	07/26/19 17:44	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1318975	1	07/26/19 08:44	07/29/19 13:43	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1318683	1	07/27/19 15:41	07/28/19 18:21	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1318694	1	07/27/19 19:02	07/28/19 01:04	LEA	Mt. Juliet, TN

0718191540 L1120882-04 Waste

Collected by
Jim Hughes

Collected date/time
07/18/19 15:40

Received date/time
07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1316067	1	07/23/19 14:47	07/23/19 14:47	BAA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1316980	1	07/24/19 18:48	07/25/19 03:53	TRB	Mt. Juliet, TN

ACCOUNT:

Colorado Oil & Gas Conservation

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L1120882

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All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

0718191530

Collected date/time: 07/18/19 15:30

SAMPLE RESULTS - 01

L1120882

ONE LAB. NATIONWIDE.



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.339		1	07/23/2019 13:41	WG1315146

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	07/26/2019 15:40	WG1315960

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.83	T8	1	07/23/2019 18:25	WG1315824

Sample Narrative:

L1120882-01 WG1315824: 7.83 at 22.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	395		10.0	1	07/22/2019 13:14	WG1315287

Mercury by Method 7471A

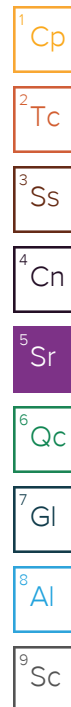
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0300	1	07/26/2019 12:35	WG1317742

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.51		2.00	1	07/26/2019 17:41	WG1317524
Barium	165		0.500	1	07/26/2019 17:41	WG1317524
Cadmium	0.523		0.500	1	07/26/2019 17:41	WG1317524
Chromium	12.0		1.00	1	07/26/2019 17:41	WG1317524
Copper	13.7		2.00	1	07/26/2019 17:41	WG1317524
Lead	9.34		0.500	1	07/26/2019 17:41	WG1317524
Nickel	11.8		2.00	1	07/26/2019 17:41	WG1317524
Selenium	ND		2.00	1	07/26/2019 17:41	WG1317524
Silver	ND		1.00	1	07/26/2019 17:41	WG1317524
Zinc	50.4		5.00	1	07/26/2019 17:41	WG1317524

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000877		0.000500	1	07/28/2019 20:21	WG1318975
Toluene	ND		0.00500	1	07/28/2019 20:21	WG1318975
Ethylbenzene	ND		0.000500	1	07/28/2019 20:21	WG1318975
Total Xylene	ND		0.00150	1	07/28/2019 20:21	WG1318975
TPH (GC/FID) Low Fraction	ND		0.100	1	07/28/2019 20:21	WG1318975
(S) a,a,a-Trifluorotoluene(FID)	94.0		77.0-120		07/28/2019 20:21	WG1318975
(S) a,a,a-Trifluorotoluene(PID)	98.0		72.0-128		07/28/2019 20:21	WG1318975



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Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		200	50	07/29/2019 12:08	WG1318636
(S) o-Terphenyl	128	J7	18.0-148		07/29/2019 12:08	WG1318636

Sample Narrative:

L1120882-01 WG1318636: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Acenaphthene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Acenaphthylene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Benzo(a)anthracene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Benzo(a)pyrene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Benzo(b)fluoranthene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Benzo(g,h,i)perylene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Benzo(k)fluoranthene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Chrysene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Dibenz(a,h)anthracene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Fluoranthene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Fluorene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Naphthalene	ND		0.0200	1	07/28/2019 05:17	WG1318694
Phenanthrene	ND		0.00600	1	07/28/2019 05:17	WG1318694
Pyrene	ND		0.00600	1	07/28/2019 05:17	WG1318694
1-Methylnaphthalene	ND		0.0200	1	07/28/2019 05:17	WG1318694
2-Methylnaphthalene	ND		0.0200	1	07/28/2019 05:17	WG1318694
2-Chloronaphthalene	ND		0.0200	1	07/28/2019 05:17	WG1318694
(S) p-Terphenyl-d14	83.9		23.0-120		07/28/2019 05:17	WG1318694
(S) Nitrobenzene-d5	82.7		14.0-149		07/28/2019 05:17	WG1318694
(S) 2-Fluorobiphenyl	76.6		34.0-125		07/28/2019 05:17	WG1318694

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		7/23/2019 2:47:36 PM	WG1316067
Fluid	1		7/23/2019 2:47:36 PM	WG1316067
Initial pH	8.30		7/23/2019 2:47:36 PM	WG1316067
Final pH	5.16		7/23/2019 2:47:36 PM	WG1316067

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Boron	ND		2.00		1	07/25/2019 03:50	WG1316980

¹Cp

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⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

0718191540

Collected date/time: 07/18/19 15:40

SAMPLE RESULTS - 03

L1120882

ONE LAB. NATIONWIDE.



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.314		1	07/23/2019 13:43	WG1315146

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND	J6 Q1	2.00	1	07/26/2019 15:41	WG1315960

Sample Narrative:

L1120882-03 WG1315960: sample is a reducer.

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	RDL	Dilution	Analysis date / time	Batch
pH	6.44	T8		1	07/23/2019 18:25	WG1315824

Sample Narrative:

L1120882-03 WG1315824: 6.44 at 22.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1690		10.0	1	07/22/2019 13:14	WG1315287

Mercury by Method 7471A

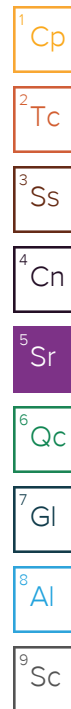
Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0300	1	07/26/2019 12:38	WG1317742

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.75		2.00	1	07/26/2019 17:44	WG1317524
Barium	184		0.500	1	07/26/2019 17:44	WG1317524
Cadmium	ND		0.500	1	07/26/2019 17:44	WG1317524
Chromium	12.9		1.00	1	07/26/2019 17:44	WG1317524
Copper	9.42		2.00	1	07/26/2019 17:44	WG1317524
Lead	15.0		0.500	1	07/26/2019 17:44	WG1317524
Nickel	15.4		2.00	1	07/26/2019 17:44	WG1317524
Selenium	ND		2.00	1	07/26/2019 17:44	WG1317524
Silver	ND		1.00	1	07/26/2019 17:44	WG1317524
Zinc	58.7		5.00	1	07/26/2019 17:44	WG1317524

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	07/29/2019 13:43	WG1318975
Toluene	ND		0.00500	1	07/29/2019 13:43	WG1318975
Ethylbenzene	ND		0.000500	1	07/29/2019 13:43	WG1318975
Total Xylene	ND		0.00150	1	07/29/2019 13:43	WG1318975
TPH (GC/FID) Low Fraction	ND		0.100	1	07/29/2019 13:43	WG1318975
(S) a,a,a-Trifluorotoluene(FID)	95.2		77.0-120		07/29/2019 13:43	WG1318975
(S) a,a,a-Trifluorotoluene(PID)	98.3		72.0-128		07/29/2019 13:43	WG1318975





Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	15.7		4.00	1	07/28/2019 18:21	WG1318683
(S) o-Terphenyl	62.4		18.0-148		07/28/2019 18:21	WG1318683

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Acenaphthene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Acenaphthylene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Benzo(a)anthracene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Benzo(a)pyrene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Benzo(b)fluoranthene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Benzo(g,h,i)perylene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Benzo(k)fluoranthene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Chrysene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Dibenz(a,h)anthracene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Fluoranthene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Fluorene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Naphthalene	ND		0.0200	1	07/28/2019 01:04	WG1318694
Phenanthrene	ND		0.00600	1	07/28/2019 01:04	WG1318694
Pyrene	ND		0.00600	1	07/28/2019 01:04	WG1318694
1-Methylnaphthalene	ND		0.0200	1	07/28/2019 01:04	WG1318694
2-Methylnaphthalene	ND		0.0200	1	07/28/2019 01:04	WG1318694
2-Chloronaphthalene	ND		0.0200	1	07/28/2019 01:04	WG1318694
(S) p-Terphenyl-d14	67.6		23.0-120		07/28/2019 01:04	WG1318694
(S) Nitrobenzene-d5	66.1		14.0-149		07/28/2019 01:04	WG1318694
(S) 2-Fluorobiphenyl	48.1		34.0-125		07/28/2019 01:04	WG1318694



Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		7/23/2019 2:47:36 PM	WG1316067
Fluid	1		7/23/2019 2:47:36 PM	WG1316067
Initial pH	7.00		7/23/2019 2:47:36 PM	WG1316067
Final pH	5.21		7/23/2019 2:47:36 PM	WG1316067

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Boron	ND		2.00		1	07/25/2019 03:53	WG1316980

¹Cp

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³Ss

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Method Blank (MB)

(MB) R3434781-1 07/26/19 15:34

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1120492-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120492-01 07/26/19 15:36 • (DUP) R3434781-3 07/26/19 15:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chromium,Hexavalent	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3434781-2 07/26/19 15:35

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	20.7	86.2	80.0-120	

L1120882-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120882-03 07/26/19 15:41 • (MS) R3434781-4 07/26/19 15:41 • (MSD) R3434781-5 07/26/19 15:42

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chromium,Hexavalent	20.0	ND	11.9	11.8	59.3	59.1	1	75.0-125	J6	J6	0.331	20

Sample Narrative:

OS: sample is a reducer.

L1120882-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1120882-03 07/26/19 15:41 • (MS) R3434781-6 07/26/19 15:45

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	679	ND	512	75.4	50	75.0-125	

Sample Narrative:

OS: sample is a reducer.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L1120882-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1120882-03 07/23/19 18:25 • (DUP) R3433466-3 07/23/19 18:25

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	6.44	6.44	1	0.000		1

Sample Narrative:

OS: 6.44 at 22.6C

DUP: 6.44 at 22.6C

Laboratory Control Sample (LCS)

(LCS) R3433466-1 07/23/19 18:25

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.96	99.6	99.0-101	

Sample Narrative:

LCS: 9.96 at 21.5C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3432898-1 07/22/19 13:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1120882-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120882-01 07/22/19 13:14 • (DUP) R3432898-3 07/22/19 13:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	umhos/cm	umhos/cm		%		%
Specific Conductance	395	398	1	0.757		20

Laboratory Control Sample (LCS)

(LCS) R3432898-2 07/22/19 13:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	umhos/cm	umhos/cm	%	%	
Specific Conductance	877	878	100	85.0-115	



Method Blank (MB)

(MB) R3434639-1 07/26/19 11:49

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	0.00818	⬇	0.00280	0.0300

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434639-2 07/26/19 11:52 • (LCSD) R3434639-3 07/26/19 11:54

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.500	0.542	0.550	108	110	80.0-120			1.58	20

L1122190-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1122190-01 07/26/19 11:57 • (MS) R3434639-4 07/26/19 11:59 • (MSD) R3434639-5 07/26/19 12:02

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.614	0.0958	0.766	0.812	109	117	1	75.0-125			5.75	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3433997-1 07/25/19 03:05

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.667	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433997-2 07/25/19 03:08 • (LCSD) R3433997-3 07/25/19 03:10

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Boron	10.0	10.0	10.1	100	101	80.0-120			0.383	20

L1120842-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120842-02 07/25/19 03:13 • (MS) R3433997-5 07/25/19 03:19 • (MSD) R3433997-6 07/25/19 03:21

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Boron	10.0	ND	10.1	10.1	101	101	1	75.0-125			0.0801	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3434924-1 07/26/19 16:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	4.64		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Copper	U		0.530	2.00
Lead	U		0.190	0.500
Nickel	U		0.490	2.00
Selenium	U		0.620	2.00
Silver	U		0.120	1.00
Zinc	U		0.590	5.00

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434924-2 07/26/19 16:51 • (LCSD) R3434924-3 07/26/19 16:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	87.7	88.9	87.7	88.9	80.0-120			1.39	20
Barium	100	95.3	96.9	95.3	96.9	80.0-120			1.61	20
Cadmium	100	90.3	91.8	90.3	91.8	80.0-120			1.69	20
Chromium	100	92.4	92.1	92.4	92.1	80.0-120			0.405	20
Copper	100	91.5	91.4	91.5	91.4	80.0-120			0.0317	20
Lead	100	89.9	91.2	89.9	91.2	80.0-120			1.44	20
Nickel	100	92.0	93.8	92.0	93.8	80.0-120			1.92	20
Selenium	100	87.4	88.3	87.4	88.3	80.0-120			1.01	20
Silver	20.0	16.5	16.5	82.6	82.6	80.0-120			0.0261	20
Zinc	100	88.8	90.3	88.8	90.3	80.0-120			1.60	20

L1121508-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121508-01 07/26/19 16:56 • (MS) R3434924-6 07/26/19 17:05 • (MSD) R3434924-7 07/26/19 17:07

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	115	12.9	112	110	86.0	83.8	1	75.0-125			2.33	20
Barium	115	225	332	344	93.2	103	1	75.0-125			3.44	20
Cadmium	115	1.66	106	105	90.0	89.5	1	75.0-125			0.583	20
Chromium	115	55.1	158	163	89.0	93.0	1	75.0-125			2.89	20
Copper	115	69.5	180	177	96.2	93.2	1	75.0-125			1.95	20
Lead	115	155	240	167	74.1	10.7	1	75.0-125	J6	J3 J6	35.9	20



L1121508-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121508-01 07/26/19 16:56 • (MS) R3434924-6 07/26/19 17:05 • (MSD) R3434924-7 07/26/19 17:07

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Nickel	115	55.7	165	170	95.0	99.4	1	75.0-125			3.00	20
Selenium	115	1.31	100	100	85.8	85.9	1	75.0-125			0.199	20
Silver	23.1	U	18.6	18.3	80.4	79.4	1	75.0-125			1.26	20
Zinc	115	278	318	243	34.8	0.000	1	75.0-125	J6	J3 J6	26.7	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3435143-3 07/28/19 16:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000249	⌋	0.000150	0.00500
Ethylbenzene	0.000112	⌋	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0236	⌋	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.6			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	98.2			72.0-128

1
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS)

(LCS) R3435143-1 07/28/19 14:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0516	103	76.0-121	
Toluene	0.0500	0.0505	101	80.0-120	
Ethylbenzene	0.0500	0.0491	98.3	80.0-124	
Total Xylene	0.150	0.142	94.7	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			95.7	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			98.6	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3435143-2 07/28/19 16:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.40	98.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			113	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			110	72.0-128	



Method Blank (MB)

(MB) R3435234-1 07/29/19 05:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	88.9			18.0-148

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3435234-2 07/29/19 05:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	40.9	81.8	50.0-150	
(S) o-Terphenyl			111	18.0-148	



Method Blank (MB)

(MB) R3435061-1 07/28/19 11:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	82.4			18.0-148

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3435061-2 07/28/19 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	46.3	92.6	50.0-150	
(S) o-Terphenyl			85.9	18.0-148	

L1121937-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121937-04 07/28/19 12:54 • (MS) R3435061-3 07/28/19 13:07 • (MSD) R3435061-4 07/28/19 13:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	49.8	ND	44.5	45.3	89.4	91.0	1	50.0-150			1.78	20
(S) o-Terphenyl					63.7	65.7		18.0-148				

Method Blank (MB)

(MB) R3435100-2 07/27/19 22:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	89.7			14.0-149
(S) 2-Fluorobiphenyl	77.1			34.0-125
(S) p-Terphenyl-d14	88.2			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3435100-1 07/27/19 22:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0846	106	50.0-126	
Acenaphthene	0.0800	0.0815	102	50.0-120	
Acenaphthylene	0.0800	0.0905	113	50.0-120	
Benzo(a)anthracene	0.0800	0.0816	102	45.0-120	
Benzo(a)pyrene	0.0800	0.0891	111	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0842	105	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0946	118	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0900	113	49.0-125	
Chrysene	0.0800	0.0826	103	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0942	118	47.0-125	
Fluoranthene	0.0800	0.0884	111	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3435100-1 07/27/19 22:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0780	97.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0956	120	46.0-125	
Naphthalene	0.0800	0.0767	95.9	50.0-120	
Phenanthrene	0.0800	0.0767	95.9	47.0-120	
Pyrene	0.0800	0.0802	100	43.0-123	
1-Methylnaphthalene	0.0800	0.0801	100	51.0-121	
2-Methylnaphthalene	0.0800	0.0767	95.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0748	93.5	50.0-120	
(S) Nitrobenzene-d5			112	14.0-149	
(S) 2-Fluorobiphenyl			94.2	34.0-125	
(S) p-Terphenyl-d14			97.5	23.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1120865-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120865-02 07/27/19 23:19 • (MS) R3435100-3 07/27/19 23:40 • (MSD) R3435100-4 07/28/19 00:01

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Anthracene	0.0800	ND	0.0677	0.0673	84.6	84.1	1	10.0-145			0.593	30
Acenaphthene	0.0800	ND	0.0635	0.0595	79.4	74.4	1	14.0-127			6.50	27
Acenaphthylene	0.0800	ND	0.0693	0.0652	86.6	81.5	1	21.0-124			6.10	25
Benzo(a)anthracene	0.0800	ND	0.0665	0.0663	83.1	82.9	1	10.0-139			0.301	30
Benzo(a)pyrene	0.0800	ND	0.0733	0.0728	91.6	91.0	1	10.0-141			0.684	31
Benzo(b)fluoranthene	0.0800	ND	0.0682	0.0680	85.3	85.0	1	10.0-140			0.294	36
Benzo(g,h,i)perylene	0.0800	ND	0.0768	0.0758	96.0	94.8	1	10.0-140			1.31	33
Benzo(k)fluoranthene	0.0800	ND	0.0741	0.0739	92.6	92.4	1	10.0-137			0.270	31
Chrysene	0.0800	ND	0.0660	0.0661	82.5	82.6	1	10.0-145			0.151	30
Dibenz(a,h)anthracene	0.0800	ND	0.0770	0.0764	96.3	95.5	1	10.0-132			0.782	31
Fluoranthene	0.0800	ND	0.0731	0.0746	91.4	93.3	1	10.0-153			2.03	33
Fluorene	0.0800	ND	0.0620	0.0597	77.5	74.6	1	11.0-130			3.78	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0776	0.0772	97.0	96.5	1	10.0-137			0.517	32
Naphthalene	0.0800	ND	0.0595	0.0550	74.4	68.8	1	10.0-135			7.86	27
Phenanthrene	0.0800	ND	0.0617	0.0610	77.1	76.3	1	10.0-144			1.14	31
Pyrene	0.0800	ND	0.0658	0.0658	82.3	82.3	1	10.0-148			0.000	35
1-Methylnaphthalene	0.0800	ND	0.0615	0.0572	76.9	71.5	1	10.0-142			7.25	28
2-Methylnaphthalene	0.0800	ND	0.0582	0.0541	72.8	67.6	1	10.0-137			7.30	28
2-Chloronaphthalene	0.0800	ND	0.0566	0.0534	70.8	66.8	1	29.0-120			5.82	24
(S) Nitrobenzene-d5					81.7	98.4		14.0-149				
(S) 2-Fluorobiphenyl					69.2	81.5		34.0-125				
(S) p-Terphenyl-d14					74.9	84.9		23.0-120				



Guide to Reading and Understanding Your Laboratory Report

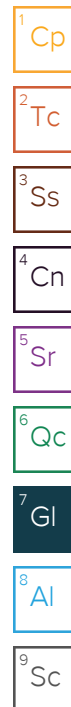
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.





Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

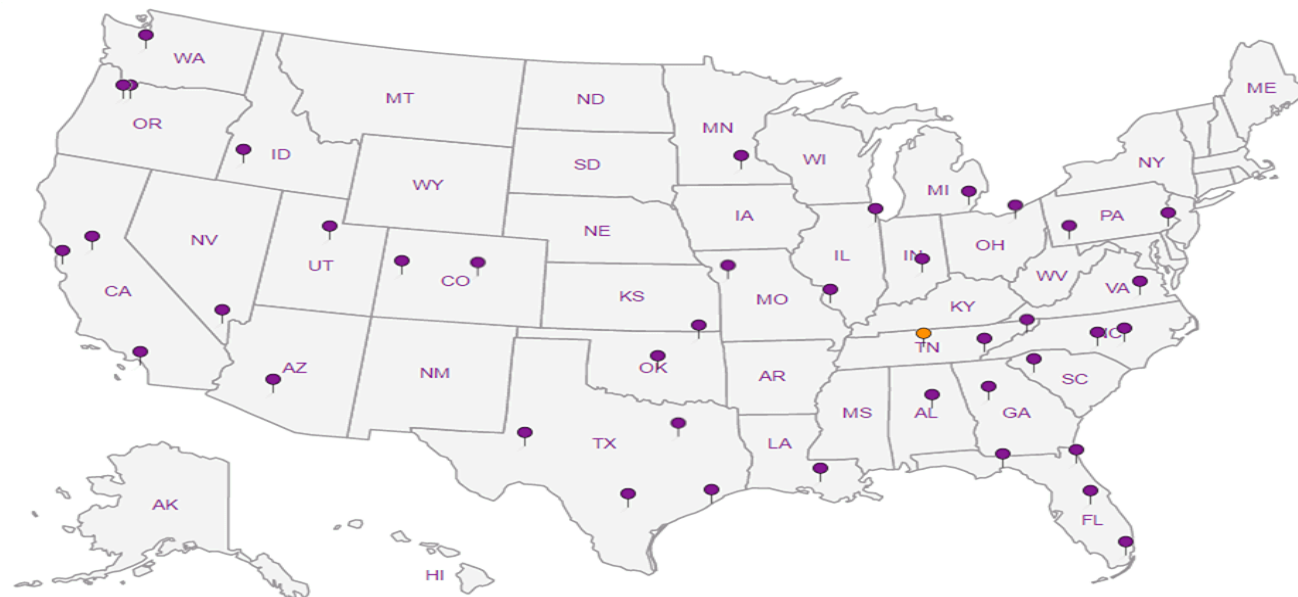
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Company Name/Address:

COGCC1120 Lincoln St., Suite 801
Denver, CO 80203

Billing Information:

Attn: Accounts Payable
1120 Lincoln St., Suite 801
Denver, CO 80203

Analysis / Container / Preservative

Chain of Custody Page ____ of ____



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to:

Jim Hughes

Email To:

jimo.hughes@state.co.us

Project

Description: **OWP Pilcher #1 AST Removal**

City/State

Collected: CO

Phone: **970-903-4072**

Client Project #

Pilcher #1

Lab Project #

Fax:

Collected by (print):

Jim Hughes

Site/Facility ID #

224353

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

☐ Same Day200%
☐ Next Day100%
☐ Two Day50%
☐ Three Day25%

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.
of
CntrsImmediately
Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

0718191530

Grab

SS

3'**7/18/19****1530**

6

0718191540

Grab

SS

3'**7/18/19****1540**

6

BTEX, GRO/DRO 4 ozCir-NoPres

Cr6, SPCON, pH, 4 ozCir-NoPres

Metals 4 ozCir-NoPres

SAR 4ozCir-NoPres

SV8270PAHSIM 4 ozCir-NoPres

TCLP Boron 1L-Cir-NoPres

L# **L1126882****J063**Acctnum: **COILGASRCO**

Template:

Prølogin: **P551149**

TSR: 288- Daphne Richards

PB:

Shipped Via: **Fedex Ground**

Rem./Contaminant

Sample # (lab only)

-01/02
 03/04

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other **RAD SCREEN: <0.5 mR/hr**
 Remarks: (If applicable) - **SS**: AGICP, ASICP, BAICP, CDICP, CRICP, CUICP, HG, NIICP, PBICP, SEICP, ZNICP

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

7/19/19

Time:

3:00 PM

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

9.10.2: 9.10.2 12COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

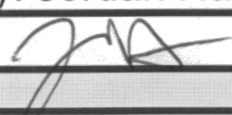
Date: **7/20/19** Time: **8:45**

pH Checked:

NCF:

4510 1654 9885

**Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form**

Client:	COILGASRCO		SDG#:	L1120882	
Cooler Received/Opened On:	7/20/19			4.0%	
Received By:	Jordan Harris				
Signature:					
Receipt Check List	NP	Yes	No		
COC Seal Present / Intact?		<input checked="" type="checkbox"/>			
COC Signed / Accurate?		<input checked="" type="checkbox"/>			
Bottles arrive intact?		<input checked="" type="checkbox"/>			
Correct bottles used?		<input checked="" type="checkbox"/>			
Sufficient volume sent?		<input checked="" type="checkbox"/>			
If Applicable					
VOA Zero headspace?					
Preservation Correct / Checked?					